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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,864	01/24/2000	Allan L. Samson	5010/097	6357

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EXAMINER

SIMITOSKI, MICHAEL J

ART UNIT

PAPER NUMBER

2134

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/489,864

Applicant(s)

SAMSON ET AL.

Examiner

Michael J Simitoski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-44 are pending.
2. The IDS of 1/19/2001 has been received and considered.

Drawings

3. The drawings are objected to because of the following informalities:

Reference numeral 203 refers to "ROM" in the specifications, but refers to "DISPLAY" in Fig. 2,

Reference numeral 204 refers to "RAM" in the specifications, but refers to "DISPLAY" in Fig. 2,

Reference numeral 230 refers to "input device" in the specifications, but refers to "I/O DEVICE" in Fig. 2

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The use of the trademarks "Modbus" and "HART" has been noted in this application (page 3, line 23 and page 6, lines 15-16). They should be capitalized wherever they appear ("MODBUS" and "HART") and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner that might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 44 recites the limitation "The Coriolis flowmeter" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 8-9, 34-36, 41 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,388,690 to Lumsden. Lumsden discloses a system comprising an automatic meter-reading transponder, having a microprocessor and memory, which stores current

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utility consumption data and transmits the data from its storage to a central computer upon receiving instructions from the central computer to do so (see col. 2, lines 17-38). Each particular transponder is allotted a customer identification code upon initialization, after which the central computer begins requesting readings and storing data in memory. The central computer, or host, scans each transponder periodically and receives recorded data from the transponder, each identified by a unique identification code (see col. 4, lines 44-59). The central computer monitors the readings of each transponder and if, for example, the client's usage is above a predefined peak level, the central computer can send a load shed command to the transponder (see col. 1, lines 10-42, col. 2, lines 17-38, col. 4, lines 44-67 and col. 5, line 1-6).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 12-14, 19-20, 23-25, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of U.S. Patent 6,487,507 to Mansfield et al. (Mansfield).

Regarding claims 12 and 23, Lumsden discloses a meter as modified above, but lacks disclosure of meter electronics for a Coriolis flowmeter. Mansfield teaches that it is known to use Coriolis flowmeters to measure mass flow and other information. Further, it is known to one

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skilled in the art that Coriolis-type flowmeters are used because of their low resistance to flow and lack of moving parts. Mansfield discloses meter electronics for an intrinsically safe Coriolis flowmeter comprising a host with a power supply connected to and powering a remote signal conditioner (see Fig. 3). The signal conditioner receives signals from pick-off sensors about the properties of the material flowing through the flow tube (see col. 3, lines 1-5 and col. 4, lines 1-24). The host receives output signals from the signal conditioner (see col. 3, lines 49-57). The flowmeter comprises two conduits, through which fluid material flows, a driver that vibrates the flow tubes and pick-off sensors affixed at opposing ends of the conduit to measure vibration of the conduits. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a Coriolis flowmeter, as taught by Mansfield, to measure flow in Lumsden's metering system to gain the benefits of the lack of moving parts and low resistance to flow.

Regarding claims 13 and 24, the claims are substantially equivalent to claim 2.

Therefore, claims 13 and 24 are rejected by a similar rationale.

Regarding claims 14 and 25, the claims are substantially equivalent to claim 3.

Therefore, claims 14 and 25 are rejected by a similar rationale.

Regarding claims 19 and 30, the claims are substantially equivalent to claim 8.

Therefore, claims 19 and 30 are rejected by a similar rationale.

Regarding claims 20 and 31, the claims are substantially equivalent to claim 9.

Therefore, claims 20 and 31 are rejected by a similar rationale.

11. Claims 5 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of U.S. Patent 5,014,038 to Leigh-Monstevens et al. (Leigh-Monstevens). Lumsden discloses a metering system as described above, but lacks terminating the operation of the system. Leigh-Monstevens teaches that in a vehicle intrusion detection system, it is advantageous to disable the starter circuit upon absence of a signal representative of a valid user of the vehicle to gain the benefit of an inexpensive method of preventing further theft (see col. 2, lines 57-66). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to terminate distribution of a utility upon detecting of tampering so as to inexpensively prevent possible further theft, as taught by Leigh-Monstevens.

12. Claims 16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Mansfield et al. in further view of Leigh-Monstevens et al. Claims 16 and 27 are substantially equivalent to claim 5 and are therefore rejected by a similar rationale.

13. Claims 4, 10, 11, 37, 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of U.S. Patent 6,289,456 to Kuo et al. (Kuo).

Regarding claims 4, 11, 37 and 44, Lumsden discloses a meter-reading system as described above, but lacks the permanent recording of information over time. Kuo teaches that creating a log, or record, of a change in state (indicating a possible intrusion) is beneficial because it creates a history that allows an indication of whether or not an administrator is aware of the event (see col. 4, lines 21-27). Therefore, it would have been obvious to one having

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ordinary skill in the art at the time the invention was made to modify Lumsden's system to keep a history of data read from the transponder so an interested party is informed of all events that have occurred, as taught by Kuo.

Regarding claims 10 and 42, Lumsden discloses a system as modified above, but lacks including a time stamp in a record of information received. Kuo teaches that including a timestamp in a record of intrusions is beneficial because it allows an investigator to narrow a theft occurrence down to some specific time frame (see col. 2, lines 40-57). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to record a timestamp in the record of data read from the transponder to narrow down an intrusion to a specific time frame and hence reduce the number of possible suspects in a theft, as taught by Kuo.

14. Claims 15, 21, 22, 26, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Mansfield et al. in further view of Kuo et al.

Regarding claims 15 and 26, the claims are substantially equivalent to claim 4. Therefore, claims 15 and 26 are rejected by a similar rationale.

Regarding claims 21 and 32, the claims are substantially equivalent to claim 10. Therefore, claims 21 and 32 are rejected by a similar rationale.

Regarding claims 22 and 33, the claims are substantially equivalent to claim 11. Therefore, claims 22 and 33 are rejected under similar rationale.

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15. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of U.S. Patent 4,933,668 to Oyer et al. (Oyer). Lumsden discloses a system that has an initial value to use for comparison to a recorded value, as described above, but lacks the central system obtaining initial information from the remote unit. Oyer teaches performing an initial calibration in a security system where a central unit polls sensors to detect those currently connected to the system and to retrieve an initial value from each, stores the initial value and then later polls for a present value to determine if a difference in the present and initial values exists (see col. 3, lines 11-35). Oyer teaches that this calibration is beneficial because the system is reliable in varying conditions, which are to be seen by the system as normal, and because the system configuration can be altered, by authorized personnel, without major system modifications (see col. 1, lines 26-59). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to include an calibration step where initial values are collected to be later compared to readings, to gain the benefit of system performance in varying conditions and the simplistic, authorized changing of configuration, as taught by Oyer.

16. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Mansfield et al. in further view of Leigh-Monstevens et al. in further view of Oyer et al. Claims 17 and 18 are substantially equivalent to claims 6 and 7, respectively. Therefore, claims 17 and 18 are rejected by a similar rationale.

17. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Mansfield et al. in further view of Oyer et al. Claims 28 and 29 are substantially equivalent to claims 6 and 7, respectively. Therefore, claims 28 and 29 are rejected by a similar rationale.

18. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Leigh-Monstevens et al. in further view of Oyer et al. Claims 39 and 40 are substantially equivalent to claims 6 and 7, respectively. Therefore, claims 39 and 40 are rejected by a similar rationale.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 3,355,944 has been referred to for the general knowledge that Coriolis-type flow-metering devices are used because of low resistance to flow and a lack of moving parts (see col. 1).

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Simitoski whose telephone number is (703)305-8191. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:30 p.m.. The examiner can also be reached on alternate Fridays from 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (703)308-4789.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

Or faxed to:

(703)746-7239 (for formal communications intended for entry)

Or:

(703)746-7240 (for informal or draft communications, please label "PROPOSED"
or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA 22202, Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should
be directed to the receptionist whose telephone number is (703) 305-9000.

MJS

17 September 2003


GREGORY MORSE
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